

## APPENDIX A

### REFERENCES

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#### REQUIRED PUBLICATIONS

##### Government Publications

###### *Department of the Army:*

TM 5-686

Power Transformer Maintenance and Commissioning, Department of the Army, Washington, DC, November, 1998 (Cited in figure 2-3).

###### *Department of Energy*

Building Commissioning Guide, version 2.2, Department of Energy, Washington, D.C., July 1998 (Cited in table 1-1).

##### Non-Government Publications

###### *American Society of Mechanical Engineers (ASME)*

Three Park Avenue, New York, NY 10016-5990

ASME Power Test Codes (PTC) 26 (cited in paragraph 3-9d)

###### *American Society for Testing and Materials (ASTM)*

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

ASTM D-924

"Standard Test Method for Dissipation Factor (or Power Factor) and Relative Permittivity (Dielectric Constant) of Electrical Insulating Liquids," ASTM, PA, 1999 (cited in paragraph 2-4i).

###### *Biddle Instruments*

510 Township Line Rd., Blue Bell, PA 19422

"A Stitch in Time...", Manual on Electrical Insulation Testing for the Practical Man, 1981 (cited in paragraph 2-7c)

###### *Institute of Electrical and Electronic Engineers (IEEE)*

445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331

ANSI/IEEE-Std 57.104-1995

"IEEE Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers," IEEE, Inc., New York, 1995. (cited in paragraph 3-3e).

ANSI/IEEE-Std 141-1993

Red Book, "Electrical Power Distribution for Industrial Plants," IEEE, Inc., New York, NY, 1993 (cited in table 3-2)

IEEE 400

"IEEE Guide for Making High-Direct-Current-Voltage Tests on Power Cable Systems in the Field", 1991 (cited in paragraph 3-13 and table 3-2)

IEEE-Std 43-2000

"IEEE Recommended Practice for Testing Insulation Resistance of Rotating Machinery," IEEE, Inc., New York, 2000 (cited in paragraph 2-7).

IEEE Std. 48-1996

"IEEE Standard Test Procedures and Requirements for Alternating Current Cable Terminations 2.5 KV through 765 KV", IEEE, Inc., New York, 1996 (cited in paragraph 2-4g and 3-13).

IEEE-Std 62-1995

"Guide for Diagnostic Field Testing of Electric Power Apparatus – Part 1: Oil Filled Power Transformers, Regulators, and Reactors," IEEE, Inc., New York, NY, 1995. (cited in table 3-1)

IEEE-Std 100-1996

PTC 26-1962

"Speed-Governing Systems for Internal Combustion Engine-Generator Units," ASME, New York, 1962 (cited in paragraph 3-9d).

IEEE-Std 386-1995

"IEEE Standard for Separable Insulated Connector Systems for Power Distribution Systems Above 600 V", IEEE, Inc., New York, 1995 (cited in paragraph 3-13).

*InterNational Electrical Testing Association (NETA)*

P.O. Box 687, Morrison, CO 80645

[www.netaworld.org](http://www.netaworld.org)

IETA 2

"Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems," NETA, CO, 1991 (cited in paragraph 3-13).

NETA-STD-ATS 1999

"Commissioning Specifications for Electrical Power Distribution Equipment and Systems," National Electrical Testing Association (cited in paragraph 2-4f and table 3-2)

Mechanical Engineering Handbook, T. Baumeister (ed.) and E. Avallone (ed.), McGraw-Hill Book Company, Inc, New York, 1978. (cited in paragraph 3-9d).

## RELATED PUBLICATIONS

### Non-Government Publications

*American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)*

1791 Tullie Circle NE, Atlanta, GA 30329

ASHREA Guideline 1-1989

"Commissioning of HVAC Systems,

*Institute of Electrical and Electronics Engineers (IEEE)*  
445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.

ANSI/IEEE 944-1986

"Recommended Practice for the Application and Testing of Uninterruptible Power Supplies for Power Generating Stations", IEEE, Inc. New York, NY, 1986.

IEEE 450-1995

"Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications", IEEE, Inc., New York, N.Y., 1995.

IEEE 484-1996

"Recommended Practice for Installation Design and Installation of Vented Lead-Acid Batteries for Stationary Applications", IEEE, Inc., 1996.

IEEE-Std 57.12.80-1995

"Standard Terminology for Power and Distribution Transformer," IEEE, New York, 1995.

IEEE-Std 95-1977

"Insulation Testing of Large AC Rotating Machinery with High Direct Voltage," IEEE, Inc., New York, 1977.

IEEE Std 242-1991

Buff Book, Protection and Coordination of Industrial and Commercial Power Systems," IEEE, Inc., New York, NY, 1991.

IEEE-Std 446-1995

Orange Book, "Emergency and Standby Power Systems for Industrial and Commercial Applications," IEEE, Inc., New York, NY, 1996.

IEEE Std. 1106-1995

"Recommended Practice for Installation, Maintenance, Testing, and Replacement of Vented Nickel-Cadmium Batteries for Stationary Applications", IEEE, Inc., New York, NY 1995.

IEEE Std. 1115-1992

"Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications", IEEE, Inc., New York, NY 1992.

IEEE-Std. 1187-1996

"Recommended Practice for Installation Design and Installation of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications", IEEE, Inc., New York, N.Y., 1996.

IEEE-Std. 1188-1996

"Recommended Practice for Maintenance, Testing, and Replacement of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications", IEEE, Inc., New York, N.Y., 1996.

"IEEE Standard Dictionary of Electrical and Electronic Terms," IEEE., New York, 1996.

Department Guide Book No. EE-31 Vol. C, "Electrical Engineering Guides and Data," Ebasco Services Inc., New York, 1993.

IEEE Transactions on Industry Applications, Vol.24, No. 6, November/December 1988  
"Commissioning of Electric Motors and Generators", Paul S. Hamer.

*National Fire Protection Association (NFPA):*

One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101

NFPA 70B

"Electrical Equipment Maintenance", National Fire Protection Association, Quincy, MA, 1998.

NFPA 110

"Emergency and Standby Power Systems," National Fire Protection Association, Quincy, MA, 1996.

NFPA 111

"Standard on Stored Electrical Energy Emergency and Standby Power Systems," National Fire Protection Association, Quincy, MA, 2001.

Standard Handbook for Electrical Engineers, D. G. Fink (ed.) and J. M. Carroll (ed.), McGraw-Hill Book Company, New York, 1968.

The J&P Transformer Book, S. Austen Stigant and A.C. Franklin, John Wiley & Sons, New York, 1973.

**PRESCRIBED FORMS**

The following forms are printed in the back of this manual and are also available on the Army Electronic Library (AEL) CD-ROM (EM 0001) and the USAPA web site (<http://www.usapa.army.mil>)

DA Form 7463-R

Circuit Switcher Inspection Checklist (Prescribed in paragraph 1-5 and 4-4a)

DA Form 7464-R

Transformer Inspection Checklist (Prescribed in paragraph 1-5 and 4-4b)

DA Form 7465-R

Switchgear Inspection Checklist (Prescribed in paragraph 1-5, 4-4c, and 5-4c)

DA Form 7466-R

Power Cable Inspection Checklist (Prescribed in paragraph 1-5, 4-4d, 5-4d, and 6-4f)

DA Form 7467-R

Main Power System Energization Checklist (Prescribed in paragraph 1-5 and 4-5b(5))

DA Form 7468-R

Engine Generator Set Inspection Checklist (Prescribed in paragraph 1-5 and 5-4a)

DA Form 7469-R

Backup Power System Inspection Checklist (Prescribed in paragraph 1-5 and 5-5f)

DA Form 7470-R

Utility and Generator Circuit Breaker Inspection Checklist (Prescribed in paragraph 1-5, 5-5f, and 6-4a)

DA Form 7471-R

Transfer Switch Inspection Checklist (Prescribed in paragraph 1-5 and 6-4b)

DA Form 7472-R

Uninterruptible Power Supply (UPS) Inspection Checklist (Prescribed in paragraph 1-5 and 6-4c)

DA Form 7473-R

Battery Inspection Checklist (Prescribed in paragraph 1-5 and 6-4d)

DA Form 7474-R

Uninterruptible Power Supply (UPS) Switchboard Inspection Checklist (Prescribed in paragraph 1-5 and 6-4e)

DA Form 7475-R

Uninterruptible Power Supply (UPS) System Inspection Checklist (Prescribed in paragraph 1-5 and 6-5k)